Martes pennanti. By Roger A. Powell

Martes pennanti Erxleben, 1777

Fisher

Mustela pennantii Erxleben (1777:470). Type locality "Eastern Canada" (Miller and Rehn, 1901, by restriction). Based on the *Fisher* of Pennant (1771).

Mustela canadensis Schreber, 1778:492. Based on the *Pekan* of Buffon (Buffon and D'Aubenton, 1765), which is a description of the same specimen called *Fisher* of Pennant, see above.

Mustela melanorhyncha Boddaert, 1784:88. Based on the *Fisher* of Pennant.

Mustela zibellina nigra Kerr, 1792:179. Type locality Eastern North America.

Viverra piscator Shaw, 1800:414. Based on *Fisher* of Pennant.

Viverra canadensis Shaw, 1800:429. Based on the *Pekan* of Buffon, see above.

Mustela nigra Turton, 1802:60. Based on the *Pekan* of Buffon.

Mustela piscatoria Lesson, 1827:150. Based on the *Fisher* of Pennant.

Martes pennantii Smith, 1843:190. First use of binominal (second *i* first dropped by Coues, 1877).

CONTEXT AND CONTENT. Order Carnivora, Family Mustelidae. The genus *Martes* includes eight (Anderson, 1970) or seven (Hagmeier, 1955) extant species. Three subspecies of *M. pennanti* were recognized (Goldman, 1935) but Hagmeier (1959) concluded that subspecies should not be designated and Coulter (1966) concluded that too few specimens were available to determine if subspecies existed.

M. p. pennanti (Erxleben, 1777:470), see above (*canadensis* Schreber, *melanorhyncha* Boddaert, *nigra* Kerr, *nigra* Turton, *rufa* Desmarest, *piscatoria* Lesson, *godmani* Fischer, *alba* Richardson, *piscator* Shaw are synonyms).

M. p. pacifica (Rhoads, 1898:423). Type locality "Lake Kichelos, Kittitass County, Washington; altitude about 8000 feet."

M. p. columbiana Goldman, 1935:176. Type locality "Stuart Lake near headwaters of Fraser River, British Columbia."

DIAGNOSIS. The fisher is the largest member of its genus (Anderson, 1970). Fur is long, except on the face. Tail, rump, and legs are black. Face, neck, and shoulders have hoary gold or silver color caused by tri-colored guard hairs. Ventrum is a uniform brown with white or cream patches of no predictable size or shape on the chest and axillar region and around the genitals.

Distinguishable from the American pine marten (*Martes americana*) by darker color, lack of buff to cream chin/chest patch, larger size, and exposed external median rootlet on the upper carnassial (Anderson, 1970).

GENERAL CHARACTERS. The fisher is a medium-sized mammal. It has the general body build of a stocky weasel and is long, thin, and set low to the ground (Fig. 1). Adult males generally weigh 3.5 to 5.5 kg and measure 90 to 120 cm total length. Females generally weigh 2.0 to 2.5 kg and measure 75 to 95 cm. A summary of weights can be found in Powell (1979a). Fur of fishers is variable between individuals, sexes and seasons. There are five toes on all feet; claws are retractable but less so than those of felids and are not sheathed. The face is wedge-shaped but not as extreme as that of weasels; there is some narrowing which resembles that of the muzzle of a canid.

DISTRIBUTION. The fisher, found only in North America, originally occurred throughout the northern forests. The fisher's range extended south into the Appalachian and Pacific Coast mountains (Fig. 2). Between 1800 and 1940, fisher populations declined or were extirpated in most of the United States and much of Canada due to overtrapping and habitat destruction by logging (Brander and Books, 1973; Irvine et al., 1964). Closed trapping seasons, habitat recovery, and reintroduction programs have allowed fishers to return to some of their former range (Balser, 1960; Brander and Books, 1973; Coulter, 1966; W. E. Dodge, in litt.; Irvine et al., 1964; Schempf and White, 1977; Yocom and McCollum, 1973) (Fig. 2). Since European settlement of North America, the northern limit to the fisher's range has been approximately 60°N latitude west of Hudson Bay and at approximately that latitude at the southern tip of James Bay in the East. The southern limit of the fisher's range during the late 1970's extended into northern California in the West, northern Minnesota, northern Wisconsin and the upper peninsula of Michigan in the Mid-West, and down the Appalachian Mountains into West Virginia in the East (Fig. 2).

FOSSIL RECORD. Two extinct mustelids, *Martes palaeosinensis* and *M. anderssoni*, both probably ancestral to fishers, are known from Pliocene China; they are placed in the subgenus *Pekania* with the fisher (Anderson, 1970). The first true fisher was *M. divuliana*, known only from the Middle Pleistocene of North America. It probably came to North America via the Bering Bridge, as relationships to *M. palaeosinensis* and *M. anderssoni* are strongly indicated (Anderson, 1970; Kurtén, 1971).

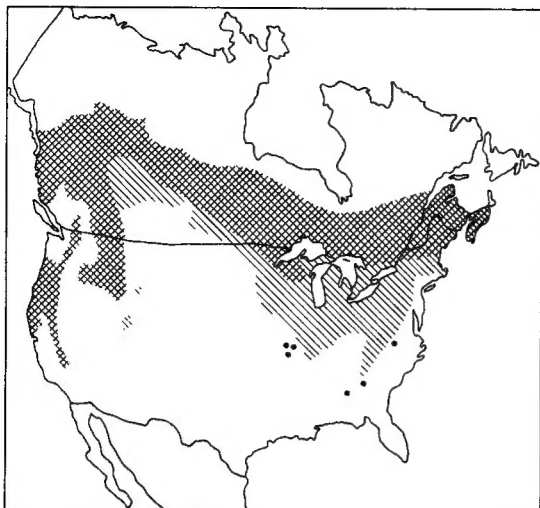FIGURE 1. Adult female fisher (photo by Roger A. Powell).

FIGURE 2. Range of fishers before European settlement of North America and smaller range at present (from Banville, 1980; Earle, 1978; Hagmeier, 1955; Peterson et al., 1977; Powell, 1977) (drawing by Constance B. Powell). Dots are fossil sites.

M. divuliana was slightly smaller than *M. pennanti*. *M. pennanti* is first recorded in the late Pleistocene and is probably not directly descended from *M. divuliana* (Anderson, 1970). There are no morphological differences between late Pleistocene fishers and modern fishers. Fossil and subfossil site distribution indicates that the fisher's range once extended further south than it has in recent times (Anderson, 1970).

FORM. Dorsal guard hairs reach 70 mm in length, while ventral guard hairs are generally less than 30 mm (Coulter, 1966). Bottoms of feet are covered with short, densely packed hairs except for pads on each toe and a central pad on each foot. Small whorls of coarse hairs are found on the central pads of the hind feet; these whorls may be associated with glands as they carry an odor distinct from other fisher odors (Powell, 1977). Fishers possess anal glands; abdominal glands have not been found (Hall, 1926) but are probably present.

Feet are large and limb posture is plantigrade. Although not as extreme in their slenderness as members of the genus *Mustela*, fishers are set low to the ground. The skeleton is that of a generalized carnivore (Leach, 1977b). Fishers are able to turn their hind feet through almost 180°, allowing them to descend trees head first (Powell, 1977).

Dentition is i 3/3, c 1/1, p 4/4, m 1/2, total 38. Upper and lower canines are about 15 mm and 13 mm in length, respectively, for males, and 12 mm and 10 mm for females. Carnassials are well developed and the mandibular fossa is elongate and hinge-like. The zygomatic arches are comparatively weak. Cranium is large relative to the jaws and there are well-developed sagittal and occipital crests (Fig. 3). Total length of the skull may exceed condylobasal length by 6 to 15 mm in adult males due to the sagittal crest. Bacula of adult males weigh about 20 g and are more than 10 cm long. The proximal end has an elevated ridge and the distal end is splayed and perforated by a small foramen (Fig. 4).

Anterior and posterior temporalis muscles are exceptionally well developed; the masseter is comparatively weak (pers. obs.).

The reproductive tracts of females are similar to those of other mustelids (Wright and Coulter, 1967). The ovaries are completely encapsulated with only a small ostium through which a small portion of the fimbria extends and the ovaries are encircled by the oviducts. Ovaries of actively pregnant fishers are readily seen and have highly vacuolated cells (Eadie and Hamilton, 1958; Wright and Coulter, 1967). The uterus has a common corpus uteri; uterine horns are 40 to 60 mm long and 2.5 to 4.0 mm in diameter in adults.

FUNCTION. The long guard hairs and dense soft underfur conserve body heat; fishers are known to be active in temperatures below −20°C (Powell, 1977). Fishers frequently walk on top of logs (deVos, 1952; Powell, 1977) and drag their bellies over small stumps, rocks, and mounds of snow (Powell, 1977). Black, tarry, fecal-like deposits are frequently found along tracks during
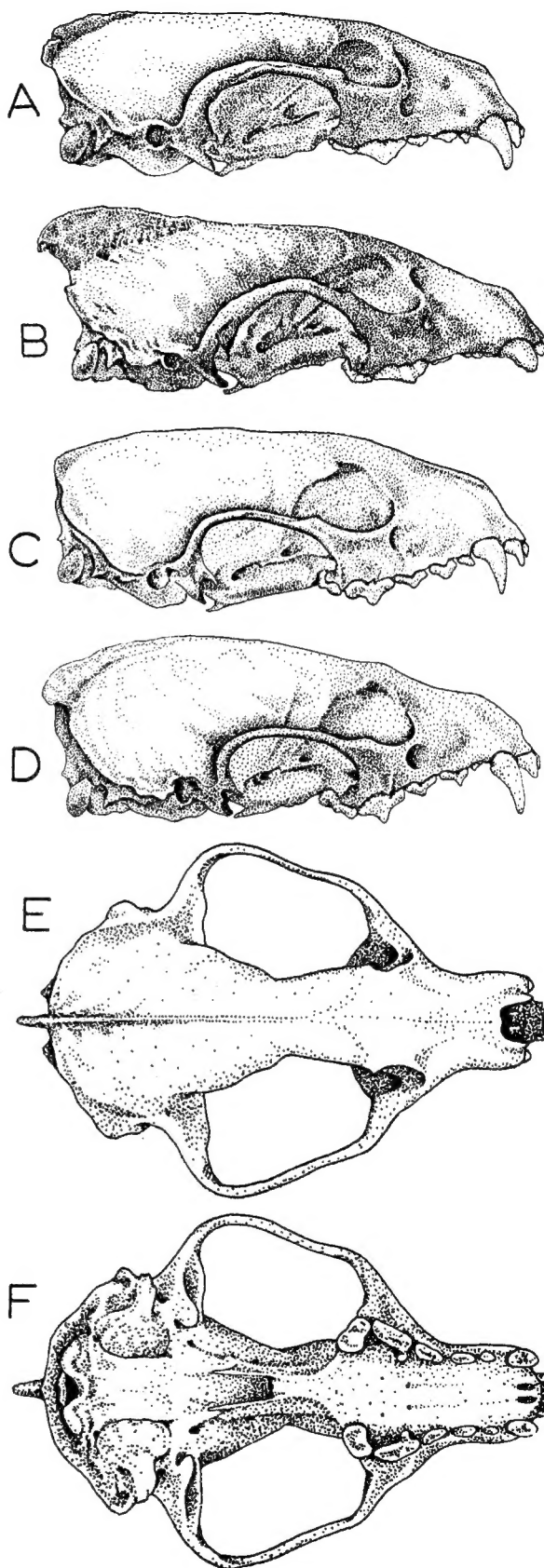

FIGURE 3. Fisher skulls: A, a juvenile male; B, an adult male; C, a juvenile female; D, an adult female; E and F, an adult male (drawings by Constance B. Powell).
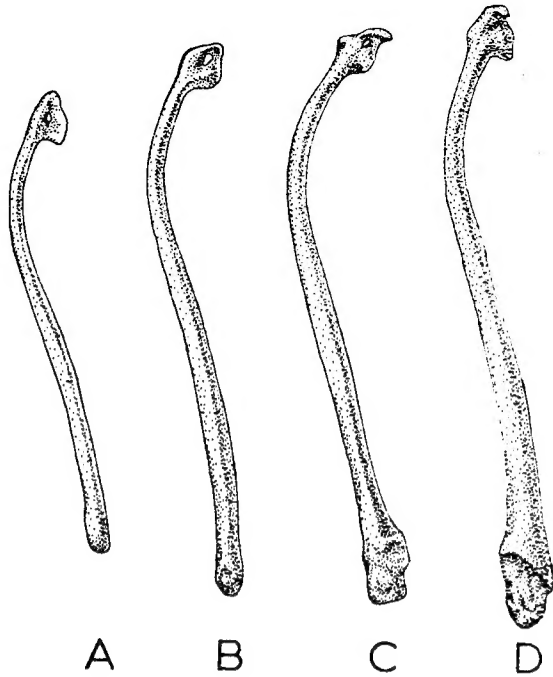
FIGURE 4. Fisher bacula (distal ends upward) showing progressive change with age. A and B are bacula from juveniles. C is from a juvenile approaching one year of age and shows deposition of bone at the basal end. D is from an adult fisher and shows the characteristic oblique ridge near the basal end and the more massive appearance (taken from Wright and Coulter, 1967) (drawings by Constance B. Powell).

the breeding season. Chemical communication may be involved with these depositions because of the presence of anal glands and possibly of foot and abdominal glands. Large feet and plantigrade posture enable fishers to walk on top of the snow. Their generalized skeleton adapts them for both terrestrial and arboreal locomotion (Leach, 1977b), though hind limb dexterity and partially retractable claws increase their arboreal abilities. The large posterior temporalis and sagittal crest compensate for the weak masseter and zygomatic arch. This places a great deal of torque on the mandibular fossa during jaw closure, which explains its hingelike structure.

ONTOGENY AND REPRODUCTION. Fishers exhibit delayed implantation of about 10 to 11 months (Enders and Pearson, 1943). Breeding occurs from March through May and appears to vary with geography (comparing parturition dates given in Coulter, 1966; Eadie and Hamilton, 1958; Hall, 1942; Hodgson, 1937; Laberee, 1941; Powell, 1977; Wright and Coulter, 1967).

Almost nothing is known about fisher courtship. Copulation lasts for several hours, sometimes more than 7 (Hodgson, 1937; Laberee, 1941).

Cleavage of the embryo to the blastocyst stage is probably slow, similar to that of the long-tailed weasel, in which the blastocyst stage is reached at day 14 (Wright, 1948; Wright and Coulter, 1967). Dormant blastocysts measure from 0.25 to 1.5 mm in diameter during winter and are clear, transparent spheres with a visible inner cell mass (Eadie and Hamilton, 1958). Dormant blastocysts have about 800 cells (Enders and Pearson, 1943).

Implantation is dependent on daylength in the American pine marten (Pearson and Enders, 1944) and in other mustelids, and the same is presumed for the fisher. The post-implantation period lasts about 30 days (Wright and Coulter, 1967). Implantation can occur as early as January and as late as early April (Powell, 1977, in press; Wright and Coulter, 1967). Parturition dates have been recorded as early as February and as late as May (Coulter, 1966; Hall, 1942; Hamilton and Cook, 1955; Hodgson, 1937; Laberee, 1941; Powell, 1977; Wright and Coulter, 1967).

Average litter size is about 3 (Eadie and Hamilton, 1958; Hall, 1942; Kelly, 1977; Wright and Coulter, 1967); maximum litter size reported is 6 (Hodgson, 1937). There is little intra-uterine mortality (Wright and Coulter, 1967).

Neonatal fishers are only partially covered with sparse, fine,

light gray hair, have their eyes and ears tightly shut and are completely helpless (Coulter, 1966; Hodgson, 1937). The characteristic long, slender shape is exhibited from birth. By day 3 kits are covered with fine gray hair and weigh about 40 g (Coulter, 1966). Between months 1 and 3 kits become chocolate brown. Thereafter, a restricted distribution of the tri-colored guard hairs characteristic of adults is found. During their first summer and autumn, fisher kits are the same general color as adults, but are more uniform in color (Coulter, 1966; Powell, in press). Females may reach adult weight by 5.5 to 6 months of age, but males may not reach full adult weight until more than a year old (Powell, in press). Sexual dimorphism in body size is pronounced by late autumn (Coulter, 1966; Hodgson, 1937; Powell, in press). Weaning begins between weeks 8 and 10 (Coulter, 1966; Powell, in press), but kits may occasionally nurse until month 4 (Coulter, 1966). Kits are not able to kill live prey effectively until month 4 or later (Coulter, 1966; Powell, in press). Intrafamilial aggression increases during the kits' fifth month (Coulter, 1966; Powell, 1977) and dispersal probably occurs sometime during that month.

Males may be reproductively mature at 1 year of age (Wright and Coulter, 1967) or at 2 years of age (Douglas and Strickland, in litt.). There is active spermatogenesis in the testes of 1-year-old males (Wright and Coulter, 1967) but there is also evidence that 1-year-old males may not be effective breeders (Douglas and Strickland, in litt.). Females reach reproductive maturity when 1 year of age and produce their first litters at 2 years of age (Eadie and Hamilton, 1958; Wright and Coulter, 1967).

ECOLOGY. Fishers prefer habitat with extensive, continuous canopy (Clem, 1977; Coulter, 1966; deVos, 1952; Kelly, 1977; Powell, 1977). Dense, lowland forests and spruce-fir forests with high canopy closure are often most preferred (Coulter, 1966; Kelly, 1977; Powell, 1977, 1978). Fishers avoid forests with little overhead cover and open areas (Clem, 1977; Coulter, 1966; Kelly, 1977; Powell, 1977, 1978).

The fisher is a generalized predator whose major prey are small to medium-sized mammals and birds, and carrion (Clem, 1977; Coulter, 1966; deVos, 1952; Hamilton and Cook, 1955; Kelly, 1977; Powell, 1977, 1978; Powell and Brander, 1977; Rosenzweig, 1966). Wherever abundant, snowshoe hares (*Lepus americanus*) are common prey. Other common prey include squirrels (*Tamiasciurus* spp., *Sciurus* spp., *Glaucomys* spp.), mice (*Peromyscus* spp., *Microtus* spp., *Clethrionomys gapperi*), and shrews (*Blarina brevicauda*, *Sorex* spp.). The porcupine (*Erethizon dorsatum*) is the fisher's best known prey but does not occur in the diet of fishers at some locations because of low porcupine populations (Kelly, 1977). Carrion is mostly that of large mammals such as white-tailed deer (*Odocoileus virginianus*) and moose (*Alces alces*). Seasonal changes in diet are minor (Clem, 1977; Coulter, 1966). Sexual differences in diet have not been found (Clem, 1977; Coulter, 1966; Kelly, 1977).

Daily energy expenditure of fishers has been estimated to range from 200 kcal to 660 kcal depending on weight, activity, and experimental assumptions (Davison, 1975; Davison et al., 1978; Powell, 1977, 1979a). This is equivalent to one porcupine every 10 to 35 days, one snowshoe hare every 2.5 to 8 days, 1 kg venison every 2.5 to 8 days, one to two squirrels per day or 7 to 22 mice per day (Davison, 1975; Davison et al., 1978; Powell, 1977, 1979a).

Estimates of fisher population densities range from one fisher per 2.6 km² (deVos, 1952) to one fisher per 200 km² (Quick, 1953), though recent estimates are about one fisher per 9 to 13 km² (Coulter, 1966; Earle, 1978; Kelly, 1977; Peterson et al., 1977; Powell, 1977). Densities in preferred habitat are about one fisher per 2.6 to 7.5 km² (Coulter, 1966; Kelly, 1977).

Fishers are not commonly subject to predation; one suspected case of great horned owl predation on a female fisher has been reported (S. Buck, pers. comm.). Because of their prey, fishers compete with coyotes (*Canis latrans*), red foxes (*Vulpes vulpes*), bobcats (*Lynx rufus*), lynx (*Lynx lynx*), and large raptors. However, no other predators are adapted to preying on porcupines as is the fisher. Therefore, fishers are without major competitors for use of porcupines as prey (Powell and Brander, 1977).

Incidence of parasites in fishers is low (Coulter, 1966; Dick and Leonard, 1979; Hamilton and Cook, 1955). The most commonly reported parasites are *Ascaris mustelarum*, *Daylisascaris devois*, *Capillaria mustelorum*, *Crenosoma* spp. (Nematoda) and *Mesocestoides variabilis* (Cestoda) (Coulter, 1966; Dick and Leonard, 1979; Hamilton and Cook, 1955; Meyer and Chitwood, 1951).

Natural causes of fisher mortality are unknown. Fishers have lived more than 10 years in zoos (New York Zool. Soc., Bronx Zoo, unpubl.). Kelly (1977) reported fishers reaching 7 years of

age and a female fisher released in Montana was a minimum of 7 years old at death (Weckwerth and Wright, 1968). Fishers 10 years old have been trapped in Ontario (Strickland, 1980). Fishers are trapped for their fur in many states and provinces but are protected in others. Trapping appears to have been the major cause of population declines during the 19th and early 20th centuries (Brander and Books, 1973; Irvine et al., 1964). Fishers are easily trapped and the value of fur has commonly provided large incentive for trappers. During the 1920's fur averaged about $100 per pelt and one pelt was sold for $345. Prices subsequently declined through the 1960's because of decreased population of long-haired furs. Recently prices have increased again to the $100 level, and in the 1978–79 trapping season the Hudson's Bay Company paid $410 for one female pelt.

Fisher populations have responded to cessation of trapping. Following season closure in the 1930's, fisher populations in many states in the United States increased. Since 1949, Maine, Massachusetts, Minnesota, New Hampshire, New York, Vermont, and West Virginia have reopened their trapping seasons for fishers (Coulter, 1966; Kelly, 1977, Minnesota Dept. Nat. Res., unpubl.). Populations have not remained stable, and during the late 1970's Maine, New Hampshire, and New York reclosed or limited their seasons because of population declines (Kelly, 1977; Powell, in press; Young, 1975). Theoretical models based on various observed factors show that fisher populations are very susceptible to increases in mortality such as from trapping (Powell, 1979b).

The main methods of studying fishers are tracking in the snow, examining trapper-caught carcasses, live-trapping with wire-mesh box traps, and radio-tagging. Captive fishers have provided valuable information on energy requirements, food digestibility, and prey-killing techniques, especially of porcupines. To anesthetize wild fishers, a combined intramuscular injection of 20.0 to 22.2 mg ketamine hydrochloride per kg body weight (20.0 mg/kg or 10.0 mg/pound) plus 2.5 mg acepromazine maleate per animal (Kelly, 1977; Powell, unpubl.) has proven better than combined use of phencyclidine hydrochloride (sernylan) and promazine hydrochloride (Powell, unpubl.).

BEHAVIOR. Fishers are solitary except for brief periods during the breeding season (Coulter, 1966; deVos, 1952; Powell, 1977, Quick 1953). Home ranges generally vary from about 15 to 35 km² (Buck et al., 1979; Hamilton and Cook, 1955; Kelly, 1977; Powell, 1977). There is extensive overlap of home ranges of male and female fishers, but overlap of home ranges for fishers of the same sex is small (Buck et al., 1980; Powell, 1979c), indicating intrasexual territoriality (Powell, 1979c). Home ranges of females (ca. 15 km²) tend to be smaller than those of males (ca. 20 km² for adult males and 25 km² for subadult males) (Kelly, 1977).

Fishers have been found to be active during the day, the night, and both day and night (Coulter, 1966; deVos, 1952; Eadie and Hamilton, 1958; Grinnell et al., 1937; Hamilton and Cook, 1955; Powell, 1977). Fishers tend to have a small number of active periods per day (Powell, 1977, 1979a). Fishers may show crepuscular activity peaks (Kelly, 1977), and they may be more active during summer than winter (Kelly, 1977). There is no significant difference in activity periods between sexes (Kelly, 1977).

Fishers are able to travel long distances in short periods of time; fishers followed by trappers have travelled 90 km in 3 days (deVos, 1952), 45 km in 2 days (Hamilton and Cook, 1955) and 10 to 11 km in a few hours (Hamilton and Cook, 1955). Movements under normal conditions are not as extensive. Straight line distances between fisher radio-telemetry locations averaged between 1.5 and 3.0 km per 24 hours in New Hampshire (Kelly, 1977). Adult males are the most mobile, adult females the least mobile, and subadults of both sexes intermediate in mobility (Kelly, 1977). Daily distances moved are greater during winter than summer, especially for females (Kelly, 1977), possibly because of restricted female movements during summer while kits are being raised (Kelly, 1977). Male fishers appear to have greatest mobility during the breeding season in March and April (Coulter, 1966; deVos, 1952; Powell, in press).

Fishers use a variety of sites for sleeping. Most sleeping sites are temporary (Coulter, 1966; deVos, 1952; Powell, 1977), but some may be used more than once by the same fisher (deVos, 1952). Common sleeping sites are hollow trees, logs and stumps, brush piles, rock falls, holes in the ground, abandoned beaver lodges, and snow dens (Coulter, 1966; deVos, 1952; Grinnell et al., 1937, Hamilton and Cook, 1955; Powell, 1977; Pringle, 1964). Maternity dens have been found in hollow trees (Coulter, 1966; Hamilton and Cook, 1955).

The arboreal abilities of fishers appear to have been overestimated (Coulter, 1966; deVos, 1952; Powell, 1977), and large

male fishers appear less adept at climbing than females (Powell, 1977). All long-term fisher studies have found that activity is predominantly terrestrial; movement from tree to tree without returning to the ground occurs predominantly in conifer forests when fishers are harrassed (Powell, 1980). However, because of their unspecialized limb anatomy, fishers are clearly adapted for climbing (Leach, 1977a, 1977b; Sokolov and Sokolov, 1971).

Known fisher vocalizations include a low chuckle (apparently associated with excitement), a hiss, and a growl (both aggressive); the latter is extremely rare (Powell, unpubl.).

Foraging patterns of fishers differ with habitat (Clem, 1977; Powell, 1977, 1978; Powell and Brander, 1977) because prey species and prey densities differ with habitat (Powell, in press). Dense conifer stands generally contain relatively high prey densities, predominantly snowshoe hares (Powell, 1977, 1978). In these habitats, foraging is characterized by frequent changes in direction and much zig-zagging (Clem, 1977; Powell, 1977, 1978; Powell and Brander, 1977). Fishers inspect coverts and forms and run along hare runs apparently attempting to flush hares (Powell, 1977, 1978; Powell and Brander, 1977). Hares are captured following a short rush (Powell, 1977, 1978), arid are killed with a bite to the back of the neck or head (Coulter, 1966; Powell, 1977, 1978). If the initial bite is not on the back of the neck or head, the fisher will wrap itself around the hare, grasp with all four feet, relocate its bite to the back of the neck and then release its grasp with its feet. Killing times as short as 15 seconds have been reported when initial bites were on the back of the neck (Powell, 1977, 1978). Hares are eaten in one meal (Powell, 1977, 1978). Squirrels are also killed with a bite on the neck (Kelly, 1977). Mice and shrews are killed either with the capture bite, with a shake, or by being swallowed; they are eaten whole (Kelly, 1977).

Foraging by fishers in upland hardwood habitats is largely confined to porcupines. In these habitats, fishers run long distances (up to 5 km) with infrequent changes in direction (Clem, 1977; Powell, 1977, 1978) and often pass within a meter of one or more porcupine dens (Powell, 1977, 1978). Resident fishers appear to know the locations of porcupine dens and direct their foraging towards dens (Powell, 1977, 1978). This reduces foraging energy expenditure in porcupine habitat by approximately one-third (Powell, 1979a). A fisher must find a porcupine on the ground to make a kill. Fishers kill porcupines with repeated attacks to the porcupines' faces (Coulter, 1966; Powell, 1977, 1978). An attacking fisher repeatedly circles a porcupine looking for a chance to bite the face, the only exposed part of a porcupine not protected with quills. The porcupine circles to keep its back towards the fisher, and if possible, it will put its face against a tree or other object for protection. The fisher may climb the tree and come down head first above the porcupine to force it back from the tree. Repeated facial wounds over a period of one-half hour or more weaken the porcupine so that it can no longer protect itself (Coulter, 1966; Powell, 1977, 1978). Porcupines may die from having the skin taken off the tops of their heads, from shock, or from blood loss. Eating commences on the ventral surface of the porcupine; heart, liver, and lungs are usually eaten first. Fishers minimize contact with quills while eating by skinning porcupines neatly; they consume all but a few large bones, the feet, intestines (sometimes), and skin with quills (Coulter, 1966; Powell, 1977, 1978). Porcupines are eaten over 2 or 3 days (Powell, 1977, 1978). A lone male fisher can consume all edible parts (ca. 75% wet weight) of a 5 to 6 kg porcupine in less than 2 days (Powell, 1977, 1978, 1979a, unpubl.).

Porcupines which den in trees or logs with only one entrance hole and those which face away from tree trunks when in trees cannot be forced onto open ground and thus are safe from fisher attack (Powell, 1977, 1978; Powell and Brander, 1977).

Fishers are uniquely adapted to prey on porcupines. Other predators of large enough size (weight) to kill porcupines are longer-legged; therefore, they are best able to attack porcupines from above and probably attack the back of the neck, which is well protected with quills. The fisher is the only large predator which has the morphology to coordinate an attack at a porcupine's face. In addition, no other predators are agile enough in trees to force a porcupine away from a tree trunk by coming down from above the porcupine.

GENETICS. A karyotype (2N = 38) for the fisher was prepared by Benirschke and Young (1966).

REMARKS. Fisher taxonomy was thoroughly confused until the beginning of the 20th century. Buffon, Brisson, and Pennant all appear to have described the fisher from the same specimen: "one in the cabinet of M. Aubry at Paris" (Coues, 1877).

Buffon (Buffon and D'Aubenton, 1765) called the animal the *Pekan*, while Pennant (1771) called it the *Fisher*. Further, Pennant described the *Pekan* of Buffon as a different species, not recognizing it as the same specimen as his own *Fisher* (Coues, 1877). These accounts were the sources of all scientific binominals of many authors for several years. Not until the middle 1800's, with the work of Audubon and Bachman (1846), Gray (1843), and Schinz (1844), was the fisher recognized as being one species. Because of some uncertainty about actual publication dates, there was a question of priority between the names *pennantii* Erxleben and *canadensis* Schreber (Coues, 1877; Rhoads, 1898).

The origin of the common name, fisher, is unknown. Fishers may have raided traps baited with fish or taken fish used as fertilizer (Coues, 1877; Hodgson, 1937). Most likely, early Dutch settlers noted the fisher's resemblance to the dark phase of the polecat (*Mustela putorius*). *Fitchet, fitche,* and *fitchew* are names for the polecat derived from the Dutch root *visse,* meaning "nasty" (Poole, 1970). The pelt of the polecat is called *fiche, ficheus,* or *fichet* in French (W. E. Dodge, in litt.). These names are all similar to fisher. The common names pekan, pequam, and wejack are more suitable. Wejack was derived from *otchoek* (Cree) and *otochilik* (Ojibwa) by furtraders. Other American Indian names for the fisher are *tha cho* (Chippewayan), meaning "big marten," and *uskool* (Wabanaki).

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